

## ANALYTE IDENTIFICATION IN TRANSFORMED ELECTROPHEROGRAMS

5

### ABSTRACT

The present invention is directed to methods for identifying one or more analytes in a sample using electrophoresis. In one embodiment, the method comprises performing an 10 electrophoretic separation by applying a potential across the separation path and thus generating a current and power therein and producing an electropherogram, integrating the current or the power to determine the cumulative current or power as a function of the separation time, transforming the electropherogram to a second electropherogram representing the signal as a function of the cumulative current or power, and identifying in the second electropherogram 15 peaks that are correlated with the analytes in the sample. The invention also provides systems for performing the analysis and identification methods, as well as computer-readable products for performing the steps associated with the above methods.